

DII.3003.Sol251.KernelP4.VDD-1

**Defense Information Infrastructure (DII)
Common Operating Environment (COE)**

Version 3.0.0.3

**Version Description Document
for the Kernel Patch 4**

(Solaris 2.5.1)

July 31, 1997

Prepared for:

Defense Information Systems Agency

Prepared by:

**Inter-National Research Institute (INRI)
12200 Sunrise Valley Drive, Suite 300
Reston, Virginia 20191**

Table of Contents

1. System Overview	1
2. Referenced Documents	1
3. Version Description	2
3.1 Inventory of Materials Released	2
3.2 Software Changes	2
4. Installation Instructions	5
5. Known Problems and Errors	5
6. Release Note	5

NOTE: Courier font is used to indicate entries to be typed at the keyboard, operating system commands, file and directory names, and screen text. For example:

The file is located in the `DII_DEV` directory.

1. System Overview

The Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.0.3 Kernel Patch 4 (Solaris 2.5.1) encompasses the following changes:

- (1) The `/h` directory now has permissions set to `777`.
- (2) A continuation prompt does not appear when an installation fails.
- (3) Icons are now supported on X terminals.
- (4) The Installer now supports `Requires` version numbers of fewer than four digits.
- (5) A security fix was added to NIS+.
- (6) The COEInstaller has been enhanced to support multiple account groups.

2. Referenced Documents

The following document is referenced in this Version Description Document (VDD):

- C DII.3003.Sol251.KernelP4.VDD-1, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.0.3 Kernel Patch 4 Installation Guide (Solaris 2.5.1)*, July 31, 1997
- C DII.3003.Sol251.Kernel.VDD-1, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.0.3 Version Description Document for the Kernel (Solaris 2.5.1)*, April 14, 1997.

3. Version Description

3.1 Inventory of Materials Released

- C Magnetic media: Two 8mm tapes consisting of a relative tar of the DII COE Version 3.0.0.3 Kernel Patch 4 (Solaris 2.5.1).
- C Soft-copy Documentation: One 3.5" floppy diskette (WordPerfect 6.0 for Windows format) containing the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.0.3 Version Description Document for the Kernel Patch 4* (Solaris 2.5.1), Document Control No. *DII.3003.Sol251.KernelP4.VDD-1*, July 31, 1997.
- C Hard-copy Documentation: Two hard copies of the aforementioned VDD.

3.2 Software Changes

Reference the following table for a list of DII COE Version 3.0.0.3 Kernel Patch 4 software changes (Solaris 2.5.1). The software changes are listed in order of INRI Number.

DII COE Version 3.0.1.0 Kernel Patch 4 (Solaris 2.5.1) Software Changes	
Total Software Changes: [6]	
INRI Number:	RTO00001646
Agency Number:	D70368
Short Description:	Multiple account groups cannot be specified.
Long Description:	Page 5-94 of the I&RTS states that the user may have "one or more \$SEGMENTS lines" in the SegName file, which would allow the segment to belong to more than one account group. However, only the first \$SEGMENT is recognized when a segment is loaded.
INRI Number:	RTO00001651
Agency Number:	D70273
Short Description:	When trying to remote display (log on as a user from a PC), the display flashes back to the XDM login display.
Long Description:	When trying to remote display (log on as a user from a PC), the display flashes back to the XDM login display. Investigation revealed that the script <code>.login COE</code> in <code>/h/COE/scripts</code> does not detect the correct display host. If the code in the above script is commented out, the remote login from a PC via a PC-XServer works correctly. (Comment out code that sets \$DISPLAY.)

DII COE Version 3.0.1.0 Kernel Patch 4 (Solaris 2.5.1) Software Changes

INRI Number: RTO00001832

Agency Number: D70484

Short Description:

The script called by the NIS Server menu has several problems that make it useless to GCCS.

Long Description:

The script called by the NIS Server menu has several problems that make it useless to GCCS:

- 1) It launches the NIS+ Server in YP compatibility mode, which negates the security inherent in NIS+. YP compatibility is only necessary if AHMS SAT terminals or HPs must be supported. YP compatibility should be a selectable option. (CR)
 - 2) The nispopulate uses the files in /etc, except for password and shadow. An option should be provided to allow you to specify the location of the files with which you wish to populate the NIS+ database. There are several reasons for this: (CR)
 - a. If the NIS+ Server is supporting HPs using NIS, the services files must be in the HP services file, not the SUN services file located in /etc.
 - b. If you wish to populate the NIS+ database using the dumped files from a previous NIS+ database (e.g., dumping the NIS+ database on a GCCS 2.2 system to be used to create NIS+ database in GCCS 3.0 System)
 - c. If the NIS+ server has a problem and must be reinitialized using the daily dumps of the NIS+ database.
 - 3) The nispopulate is done during a reboot. This makes it extremely difficult to troubleshoot if problems are encountered. (CR)
- Items 1-3 are SCP's. Item 4 is a GSPR. This GSPR will be split up into separate GSPRs:
- 4) The following command is being performed at the end of the nispopulate: /usr/bin/nischmod n+r passwd.org_dir. This was a work-around that was necessary in Solaris 2.3. It is not necessary in Solaris 2.5.1 and has security implications if done. (PR)

DII COE Version 3.0.1.0 Kernel Patch 4 (Solaris 2.5.1) Software Changes**INRI Number:** RTO00001833**Agency Number:** D70377**Short Description:**

COEInstError does not work properly.

Long Description:

COEInstError does not work as stated in the new I&RTS; the new I&RTS states that COEInstError stops all processing on a segment. The proper use of the tool is that the developer should do any required clean-up after an error is discovered. Then once the clean-up is done, COEInstError should be passed to the installer for it to end its processing and cleanup. As it currently stands, COEInstError does not stop the processing and exiting with a (-1) does not stop the process either.

Rollup of D70259 (Duplicate)

Rollup of D70342

The COEInstError function does not terminate the PostInstall when it is called, nor does it return an exit status of -1. All it does do is display an error window with the message it was given. The PostInstall continues to run to completion.

INRI Number: RTO00001834**Agency Number:** D70421**Short Description:**

The user receives a CoeInstaller segmentation fault when specifying a partial version in the [Requires] descriptor.

Long Description:

A sample segment with a version number of 1.0.0.3 is loaded in the system. Its name is "Segment One" and its prefix is "One". A second segment states its dependency on the first in the (Requires) section of the seginfo file as shown:

Segment One: One:/h/One:1.0

Attempting to load Segment Two results in segmentation fault.

On a Solaris System (v3.0.0.3) without Kernel Patch 2, Segment Two will load from tape with the warning:
CanInstall: ERROR, Bad Version Field:1.0, use format x.x.x.x

Segment Two will not load from network; the user receives the warning "The required segment not found in disk."

According to the I&RTS Rev 3.0, Section 3.1.1, Segment Version Numbers, Segment A may indicate that it requires Segment B, Version 2.3, indicating that any maintenance release of Version 2.3 (e.g., 2.3.2.0, 2.3.1.2) is acceptable.

DII COE Version 3.0.1.0 Kernel Patch 4 (Solaris 2.5.1) Software Changes	
INRI Number:	RTO00001836
Agency Number:	D70348
Short Description:	Directory /h needs 777 permissions.
Long Description:	The directory /h currently has 775 permissions and needs 777 permissions. Owner is root and group is COE. A segment in /h needs to be able to write to its own directory without being root or COE group. Work Around: As root, type in the command <code>chmod 777 /h</code> .

4. Installation Instructions

Refer to the *DII COE Version 3.0.0.3 Kernel Patch 4 Installation Guide (Solaris 2.5.1)* for instructions on installing the developer's toolkit.

5. Known Problems and Errors

None.

6. Release Note

1. In order for the Xterminal or PC Terminal software to properly function, either the local hosts table must contain the terminals machine id *or* DNS must be configured and the terminals machine id must be listed in the DNS host tables.